

## REMARKS

In response to the Office action dated October 2, 2006, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-36 are pending in the present Application. Claims 14-28 have been previously withdrawn. Claims 1, 7, 29 and 34 have been amended, leaving claims 1-13 and 29-36 for consideration upon entry of the present amendments and following remarks.

Support for the amendments to the claims can at least be found in the specification, the figures, and the claims as originally filed.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

### **Claim Rejections Under 35 U.S.C. § 102**

Claims 1 and 35-36 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Ishida et al. (U.S. Patent No. 7,057,678, hereinafter "Ishida"). The Examiner states that Ishida discloses all of the elements of the abovementioned claims, primarily in FIG. 1, column 1, lines 43 and 64-65 and column 2, lines 6-19. Applicants respectfully traverse.

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984).

The Examiner states that, "Ishida corroborates, 'A single cable (not shown) is connected at one end thereof to the return substrate 28 and is also connected at an opposite end thereof to an inverter substrate (not shown), which inverter substrate is connected to high-pressure-side end portions (not shown) of the lamps 27'" at paragraph 2 of the Response to Arguments on page 2, lines 8-11 of the Detailed Action). In addition, the Examiner further states, "Ishida obviously teaches a second board, coupled to the second electrode, for providing the second electrode with

the second discharge voltage on the opposite side of Figure 1” at paragraph 15 of the Claim Rejections on page 8, lines 17-19 of the Detailed Action.

However, it is respectfully submitted that Ishida does not disclose a second board at the high-pressure-side end portions, and only discloses an inverter substrate 17 near the high high-pressure-side end portions in FIG. 4, wherein the inverter substrate is not coupled to the second electrode and does not provide the second electrode with a discharge voltage.

Therefore, it is respectfully submitted that none of the cited references, including Ishida, either alone or in combination, fail to teach “a second board, coupled to the second electrode, for providing the second electrode with the second discharge voltage” as recited in amended claims 1 and 29. Thus Claims 1 and 29, including claims depending therefrom, i.e., Claims 2-13 and 30-36, define over Ishida.

Accordingly, it is respectfully requested that the rejection of Claims 1 and 35-36 under § 102(e) be withdrawn.

#### **Claim Rejections Under 35 U.S.C. § 103**

Claims 2-5, 7-11 and 13 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ishida in view of Mazis (U.S. Patent No. 4,504,891, hereinafter “Mazis”). Applicants respectfully traverse.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

It is respectfully noted that Claims 2-5, 7-11 and 13 depend from Claim 1, which is submitted as being allowable for defining over Ishida as discussed above. Further, it is respectfully submitted that use of the first board disclosed in Mazis does not cure the deficiencies noted above with respect to Ishida.

Moreover, the Examiner admits on page 6 of the present Office Action that Ishida does not disclose the first board having at least two first through-holes formed on the insulated body, whereby the each of the first through-holes receives the first electrode of each of the lamps. However, the Examiner alleges that FIG. 3 of Mazis teaches a first board [44]; at least one first conductive pattern [45] electrically connected to the first electrode of the plurality of lamps; and at least two first through-holes [46] formed on the insulated body.

However, it is respectfully submitted that the lamp system of Mazis teaches that the regions of the conductive strips 45 on the wiring plate 44 which contact the socket contacts 28 are shown as 46. (Col. 3, lines 55-57.) Thus, reference numeral “46” of Mazis discloses a conductive strip, not a through-hole as alleged by the Examiner.

The Examiner also suggests that Oyokota – JP2002132193A teaches a second board coupled to the second electrode for providing the second electrode with the second discharge voltage on the opposite side as allegedly disclosed in FIG. 1 of Oyokota.

However, it is respectfully submitted that Oyokota discloses a lighting installation that is constituted to illuminate an object for illumination from its rear with the transmitted light from the cold cathode fluorescent tubes [2] having electrodes at each of both ends in the axial direction of the tubes by impressing high-frequency voltages from inverter circuits to the fluorescent tubes [2]. The plurality of the fluorescent tubes [2] are disposed nearly parallel to each other and circuit boards 14 formed with the inverter circuits are disposed at each one-side end of the plurality of the fluorescent tubes [2] or near the same and the high-frequency output side output terminals Vo of the inverter circuits are connected to the electrodes disposed to each one-side end of the fluorescent tubes [2]. (Abstract). Oyokota further discloses with reference to FIGS. 1 and 3 thereof that one end of each lamp [2] is disposed in a corresponding groove [9a] of a lamp holder rail [9] and sandwiched with another lamp holder rail [10]. A pair of stacked inverter circuit substrates [14] are disposed over a respective lamp holder with a member [11] disposed therebetween. Oyokota does not teach or suggest “a second board, coupled to the second electrode, for providing the second electrode with the second discharge voltage”, as recited in amended independent Claim 1.

Lastly, the Examiner states that “it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art” and cites *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8, for such a holding.

First it is respectfully submitted that *St. Regis Paper Co. v. Bemis Co.* at page 8 relied upon by the Examiner holds that “[c]ombination cannot be patented unless it is synergistic, that is, results in effect greater than the sum of several effects taken separately.” In the present invention, the first and second boards are disposed at opposite ends of the lamps and have major planar surfaces thereof facing each other such that the major planar surfaces of the first and second boards are substantially perpendicular to a longitudinal direction of each of the lamps while having opposing electrodes of each of the lamps extending through a respective first or second board to be fixed therewith. In this manner, the combination of the first and second boards and the lamps facilitates replacement of the lamps is an aspect, feature and advantage of the invention in which the problem of the prior art is discussed on page 2, lines 7-19 of the specification as originally filed. Furthermore, the Brief Summary of the Invention beginning discloses on page 2, line 25 of the specification that “[t]he present invention provides a lamp assembly in which the number of components of the lamp assembly is minimized, an assembling process is simplified and **lamps are easily replaced.**” (Emphasis added.) Therefore, the combination of the opposing first and second boards with the lamps interposed therebetween is synergistic, in that such a combination results in effect greater than the sum of the first and second boards taken separately. In other words, the first and second boards connected to the lamps therebetween and having respective first and second connectors for connection with an inverter facilitates removal and assembly of the lamps with a display device as opposed to the first and second boards being assembled and removed separately when removing/installing the lamps. Thus, the present invention is nonobvious. See also dissent of *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 12.

Neither Ishida nor Mazis, either alone or in combination, teach or suggest, a first board that makes contact with the first lamp holder, the first board having a flat plate shape and being coupled to first electrodes of the lamps to provide the first electrodes with the first discharge voltage, the first electrode extending through the first board to an opposite surface thereof; a second board, coupled to the second electrode, for providing the second electrode with the

second discharge voltage. . . wherein the first board comprises: a first insulated body; at least one first conductive pattern electrically connected to the first electrode of each of the lamps; and at least two first through-holes formed on the first insulated body, each of the first through-holes receiving the first electrode of each of the lamps, as in Claim 2. Thus, Claim 2, including claims depending therefrom, i.e., Claims 3-5, define over Ishida in view of Mazis. Likewise, in similar manner discussed above, claim 8, including claims depending therefrom, i.e., Claims 9-11, define over Ishida in view of Mazis.

Accordingly, it is respectfully requested that the rejection of Claims 2-5, 7-11 and 13 under § 103(a) be withdrawn.

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida in view of Mazis and further in view of Saito, U.S. Patent No. 6,441,874 (hereinafter “Saito”) as applied to Claim 1, and Claims 8-11 are rejected over Ishida as applied to Claim 7 above (which limitations are included in Claim 1, as amended), all further in view of Mazis. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida as applied to Claim 7 above (which limitations are included in Claim 1, as amended), and further in view of Mazis in view of Saito. Claims 33 and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida as applied to Claim 29 above, and in further in view of Saito. Applicants respectfully traverse.

Dependent claims inherit all of the limitations of the respective parent claim.

Claims 6, 8-12, 33 and 34 variously depend from Claims 1 and 29. As discussed above, Ishida and Mazis do not teach or suggest, either alone or in combination, at least all of the limitations of at least amended Claims 1 and 29. Saito also does not teach at least all of the limitations of amended Claims 1 and 29. Therefore, Saito does not remedy the deficiencies of Ishida and Mazis with respect to amended Claims 1 and 29. Accordingly, Ishida, Mazis and Saito do not teach all of the limitations of Claims 6, 8-12, 33 and 34.

Since Ishida, Mazis and Saito, alone or in combination, do not teach or suggest all of the limitations of at least Claims 6, 8-12, 33 and 34, *prima facie* obviousness does not exist regarding Claims 6, 8-12, 33 and 34 with respect to the Ishida, Mazis and Saito patents.

Additionally, since Ishida, Mazis and Saito fail to teach or suggest all of the limitations of Claims 6, 8-12, 33 and 34, clearly, one of ordinary skill at the time of Applicants’ invention

would not have a motivation to modify or combine the references, or a reasonable likelihood of success in forming the claimed invention by modifying or combining the references. Thus, here again, *prima facie* does not exist.

Thus, *prime facie* obviousness does not exist regarding Claims 6, 8-12, 33 and 34 with respect to the Ishida, Mazis and Saito patents. Applicants respectfully submit that Claims 6, 8-12, 33 and 34 are not further rejected or objected and are therefore allowable. Reconsideration and allowance of Claims 6, 8-12, 33 and 34 is respectfully requested.

### **Conclusion**

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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